It is beyond the scope of this paper to analyze these tables in detail, but it is hoped that the information that they contain will be useful to county health departments and others involved in local health programs. It should be emphasized, however, that general morbidity in a county is only one factor affecting the discharge rates shown here. For example, we have noticed in Table 7 that some counties whose residents have high rates for obstetric and perinatal complications, such as Durham, Forsyth, and Mecklenburg, have large medical centers located there. It could be that part of their relatively high rate is due to better diagnosis of these complications in the larger tertiary-care hospitals, and/or to a higher rate of hospital admission for these conditions where sophisticated treatment is available nearby. Warren County, on the other hand, with a relatively high rate for obstetric/perinatal complications, is a very rural county where these factors are not as likely to operate.

Please refer to the "Discussion" section for further consideration of factors affecting hospital use.

## Medicare and Medicaid Surgery Rates by County

Tables 8 and 9 show discharges with surgery per 1000 Medicare enrollees and Medicaid eligibles by county. A discharge was counted as having a certain type of surgery if the surgery code appeared in any position of the procedure-code field of the medical record, not just under "principal procedure." Therefore, a discharge could be counted in more than one category if more than one of these procedures were performed. (The procedures selected here are, however, very likely to be the principal procedure and not likely to appear together.) As with the diagnoses, the major constraint here was finding procedures with enough cases to break out over 100 counties and still have most of the rates with 20 or more discharges in the numerator. No procedure met this criterion for Medicaid patients and so only total surgery is shown, which excludes most diagnostic and nonoperative procedures. Transurethral prostatectomy accounts for about 89 percent of all prostatectomies, and the other types were excluded from Table 8 under the assumption that they are generally less elective than the transurethral prostatectomy.

Other types of surgery that have fairly high frequency for Medicare and/or Medicaid patients, but were not included here because a county-level analysis could not be sustained, are hysterectomy (most patients are under age 65), cardiac catheterization, Cesarean section, appendectomy, and hemorrhoidectomy. High-frequency procedures that were not included because a large number of outpatient procedures performed in some areas could invalidate comparisons based on these inpatient data are diagnostic dilation and curettage of the uterus, occlusion of fallopion tubes, extraction of lens, and tonsillectomy.

Tables 8 and 9 reveal that, for North Carolina as a whole, Medicare enrollees had 143 discharges with surgery per 1000 compared to 61 for Medicaid eligibles. Thirty-nine percent of Medicare discharges to North Carolina residents had a mention of surgery on the medical record, while the figure for Medicaid is 50 percent. The percent of discharges with surgery should be viewed with caution since a county could have a very high total discharge rate and a high surgery rate, but a relatively low ratio of surgery to total discharges. For an example in the other direction, Medicaid patients in North Carolina on the average have a relatively low total discharge rate and a low surgery rate, compared to all payment sources combined, but the ratio of surgery to total discharges is